

Hundred Hop Trail

Build and record a count from 0 to 1,000.

GRADE 2 • 2.NS.1.d

2.NS.1.d "Represent forward counting patterns when counting by groups of 100 up to at least 1,000 starting at 0 using a variety of tools (e.g., objects, number lines, calculators, one thousand charts)."

NAME _____ DATE _____

Work with an adult. Build and count aloud. Write records on the lines and in blank cells.

Materials and setup

Bring 10 base-ten hundred flats with unit grids, a calculator and a pencil. Keep the whole set available. Clear the table before each new count.

Try the idea

One hundred flat has 100 unit squares. Each new flat adds 100 to the total. Start with no flats: that is 0.

Try it together

A counter goes from 600 to 700. How much was added?

One change

Look	Record
Before	600
After	700

Compare 600 and 700. 700 is one hundred more than 600. 100 was added.

1. Start at zero

Begin with no flats. Say and write 0. Add one flat at a time until you have all 10. Say and write every total, ending at 1,000.

2. Match models to totals

Build each number of flats in the table. Count by 100. Write how many unit squares the flats represent.

Count the flats

Look	Record
2 flats	
5 flats	
8 flats	

3. Try a calculator

Clear the calculator to 0. Enter +100 and =. Repeat +100 and = two more times. Write the three totals in order. Tell how the display matches adding flats.

4. Find the skipped total

The count reads 0, 100, 200, 400, 500. Build the count with flats. What total was skipped? Write it and explain aloud.

5. Books in crates

Each crate holds 100 books. Begin with 0 crates and 0 books. Add a flat for each crate. Write the total books after 1, 2 and 3 crates.

Total books so far

Look	Record
After 1 crate	
After 2 crates	
After 3 crates	

6. Reach one thousand

A class has packed 800 cards. Each new box holds 100 more. Start with 8 flats. Add flats until you reach 1,000. Write each new total and the number of new boxes.

7. One more hundred

Use the calculator to count by 100 from 0 through 1,100. Write the final three totals. Explain why the count can continue past 1,000.

Teacher notes

Watch the complete physical count starting with zero; the written sequence must include all eleven totals through 1,000. Calculator steps explicitly repeat $+100$ and $=$, so no constant-operation feature is assumed. Tables record totals across all crates, not the contents of a single crate. Accept comma-free numerals.

Task 1

0, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1,000.

Task 2

2 flats: 200; 5 flats: 500; 8 flats: 800.

Task 3

100, 200, 300. Each step adds 100, like adding one hundred flat.

Task 4

300; after 200, one more hundred is 300, then 400.

Task 5

1 crate: 100 books; 2 crates: 200 books; 3 crates: 300 books.

Each hundred flat stands for all the books in one crate. Count cumulative totals from zero.

Task 6

900, 1,000; 2 new boxes.

$800 + 100 = 900$; $900 + 100 = 1,000$. Two added flats represent two new boxes.

Task 7

900, 1,000, 1,100. Keep adding 100; the pattern does not stop at 1,000.